Fatality Narrative

Worker Electrocuted when Track Hoe Boom Contacts Overhead Power Line*

Industry: Construction Release Date: June 12, 2003

Occupation: Construction worker Case No.: 02WA070

Task: Placing sewer pipe in trench

SHARP Report No.: 71-10-2003

Type of Incident: Electrocution

On December 2, 2002, a construction worker was helping direct a track hoe operator in moving a PVC sewer pipe into a trench. The construction worker was electrocuted when the boom of the track hoe contacted an overhead power line. The victim was a 26-year-old male who was working with a general contractor to install sewer lines at a new residential development. He had attached a pipe section to a hook on the bucket of the track hoe with a wire rope choker. He had one hand on the wire rope as the pipe was being moved into the trench when the boom of the track hoe made contact with a 7200-volt overhead power line. The electric current traveled through the boom and down the wire rope choker to the victim who was electrocuted. The track hoe operator was not injured.

Requirements/Recommendations

(! Indicates requirements)

- ! Employers must evaluate the work site for electrical hazards, including both overhead and underground, before starting work, and then determine how best to move and place equipment. [see WAC 296-155-428(1)(d) for details]
- ! When operating mechanized equipment near overhead power lines make sure that the **equipment**, or any **material** being moved by the equipment, is at least 10 feet away from the power lines. [see WAC 296-155-428(1)(e) for details]
- ! Employees standing on the ground near equipment that is working in the vicinity of overhead power lines must not contact the equipment or the rigging. [see WAC 296-155-428(20)(c) for details]
- Workers should be trained to recognize electrical hazards.
- ! A qualified worker must be assigned to observe the clearance of mechanized equipment operating near power lines when it is difficult for the operator to maintain the required distance. This should be the **only** duty of this worker during equipment movement and operation. [see WAC 296-155-525(3)(e) for details]
- A non-conductive tag line or guide rope should be used to steady and control free swinging loads. Care must be taken when choosing lines or ropes because if a non-conducting material gets wet, it may conduct electricity.

State Wide Statistics: This was the 73rd work-related fatality in Washington State during the year 2002 and was the 4th electrocution fatality of the year.

This bulletin was developed at the Washington State Department of Labor and Industries to alert employers and employees in a timely manner of a tragic loss of life of a worker in Washington State. We encourage you to consider the above information as you make safety decisions for or recommendations to your company or constituency. The information in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.

Developed by the Washington State Fatality Assessment and Control Evaluation (FACE) and Washington Industrial Safety and Health Act (WISHA) Programs at the WA State Dept. of Labor & Industries. For more information, contact the Safety and Health Assessment and Research for Prevention (SHARP) Program, 1-888-667-4277, http://www.lni.wa.gov/sharp/face.